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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,402	08/03/2006	Gunther Flattinger	FLATTINGER ET AL - 1 PCT	6943
25889	7590	03/14/2012	EXAMINER	
JENNISON, BRIAN W				
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			ART UNIT	PAPER NUMBER
			3742	
			MAIL DATE	DELIVERY MODE
			03/14/2012	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/588,402

**Applicant(s)**

FLATTINGER ET AL.

**Examiner**

BRIAN JENNISON

**Art Unit**

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 51-100 is/are pending in the application.
- 5a) Of the above claim(s) 90-100 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 51-89 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/12/2011 has been entered.

***Claim Objections***

2. Claim 51 is objected to because of the following informalities: The phrase "as well as" is used. Appropriate correction is required.

***Claim Analysis***

3. Applicant is reminded that drawing numbers in the claim are not given patentable weight as it is improper to import claim limitations from the specification. See *In re Paulsen*, 31 USPQ2d 1671 (Fed. Cir. 1994).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

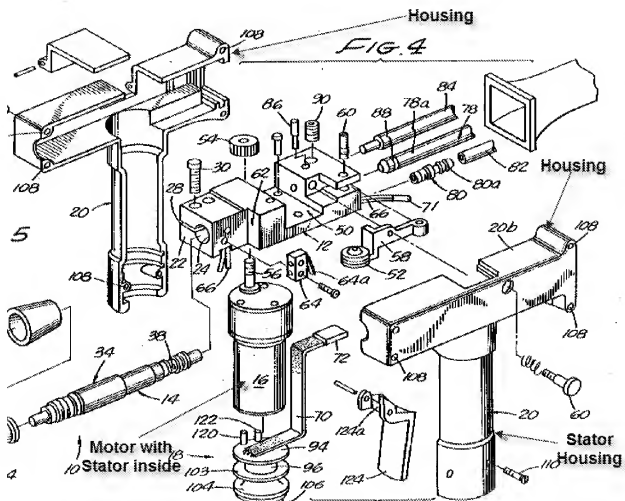
5. **Claims 51-58, 60-63, 65, 67-68, 70-79, 80-84, 87-89 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kensrue (US 4,954,690).**

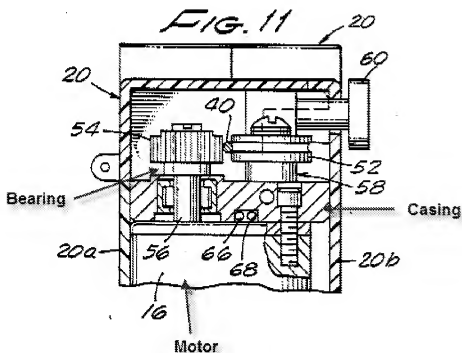
Kensrue teaches:

**Regarding Claim 51:** A welding torch including a torch housing, wherein a drive unit formed by at least one drive roller and one pressure roller (**Fig 1 shows a casing or torch housing 20 with a drive roller 54 and a roller 52 for providing pressure**) as well as a drive motor is arranged in the torch housing for feeding a welding wire, wherein the torch housing comprises a base body that forms a stator housing of the drive motor of the drive unit. (**Fig 5 shows a drive motor 16 inside the casing 20 for feeding welding wire 40a**), (**Fig 5 shows part of the housing being a stator housing of the drive unit with the stator being inside of the motor 16 which is inside the casing 20. The stator housing and base body are all indefinite areas in the torch housing. No structure is claimed for dividing the torch housing or defining the "imaginary" areas claimed. There is no recitation in the claim as to where the base body resides in the torch housing or what structure the base body comprises. Since no structure for the base body and stator housing are claimed these terms are "just names" and can be considered any part of the structure that the stator is near. The drawing reference numbers are not given patentable weight. ) and bearings are provided on the torch housing to stabilize and position a rotor of the drive motor. (The motor 16 would contain bearings and a rotating device since it is an electric motor.)** The claim does not specify which part of the housing must be the stator housing. The *part* of the welding gun housing that the stator is located in is considered the part of the housing which is the stator housing. Any Furthermore, no actual stator is even mentioned in the claim just housing for it. **Fig 11**

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as reproduced below shows a bearing located on the housing. The motor would comprise stator windings.





**Regarding Claim 52:** Fig 4 shows the casing 20 or torch housing being comprised of several parts.

**Regarding Claim 53:** Fig 1 shows the casing 20 to have a base behind 124 and a rectangular cover part on top of casing 20. Fig 1 also shows an extension part at the bottom of the handle of casing 20.

**Regarding Claim 54,** Fig 4 shows the base part of casing 20 directly below the rectangular opening to contain a free space for parts of the motor 16 and is capable of having other elements attached.

**Regarding Claims 56-57:** Motor 16 contains a stator winding and magnets and bearings on top of motor 16 which is enclosed in casing 20. These elements are common in electric motors.

**Regarding Claim 58:** Motor 16 has an intermediate piece at its top which would contain bearings and is attached to the casing 20.

**Regarding Claim 60:** Fig 4 shows the motor 16 to have a motor shaft 56 which would also contain a winding and magnet inside motor 16 since it is an electric motor which rotates.

**Regarding Claims 61 and 79:** Fig 4 shows block 12 which acts as an insulation plate and is attached to the intermediate piece on top of motor 16 and the drive roller.

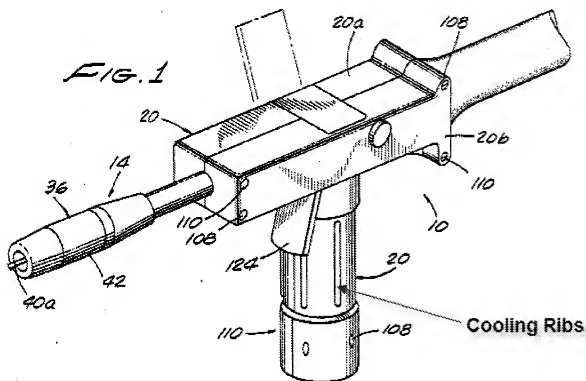
**Regarding Claim 62:** Drive roller 54 is attached to the drive shaft 56 of motor 16. **See Column 4, Lines 15-18.**

**Regarding Claim 63:** Fig 2 shows a gear around drive roller 54 which is connected to motor shaft 56.

**Regarding Claim 65:** The casing is made of plastic which enables cooling of its parts. **See Column 5, Lines 9-12.**

**Regarding Claims 67-68:** Fig 1 shows a welding torch for manual welding with a grip forming a T shape above 110 and 108 with the drive motor installed in the region of the

grip as shown in Fig 4. The grip also contains ribs around it which can function as a cooling mechanism.



**Regarding Claims 70-72:** Fig 4 shows a micro switch 64 which is an electronic device for controlling the motor and is arranged externally to the motor but integrated in the casing 20. **See Column 4, Lines 25-36.**

**Regarding Claim 73:** The casing is made of plastic. **See Column 5, Lines 9-12.**

**Regarding Claim 74:** Block 12 functions as a mounting plate which has guide elements mounted to it. **See Fig 4.**

**Regarding Claim 75:** The motor 16 is a variable speed control torque motor which is a type of synchro or servo motor. **See Column 1, Lines 45-50.**



**Regarding Claims 76-77:** The motor may be a DC motor and is a step motor since it is capable of variable speeds.

**Regarding Claim 78:** Fig 4 shows the block 12 arranged between the drive roller 54 and the base body around the motor 16 which acts as insulation.

**Regarding Claim 81:** The block 12 conducts the current. **See Column 4, Lines 52-54.**

**Regarding Claim 82:** The casing 20 has a plastic non conductive coating. **See Column 5, Lines 9-12.**

**Regarding Claim 83:** The torch retainer which is part of the casing is made of plastic which is a non conductive material. **See Column 5, Lines 9-12.**

**Regarding Claim 84:** The drive motor 16 is capable of having additional modules to adjust the output and response behavior.

**Regarding Claim 88:** A spring controls the pressure of the drive roller and is attached to the block 12.

**Regarding Claim 89:** Fig 1 shows the casing 20 being divided along an axis.

**Regarding Claim 80:**

Kensrue discloses the claimed invention except for the drive roller being made out of an electrically non-conductive material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the drive roller out of an electrically non-conductive material, since it has been held to be within the general skill the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

**Regarding Claim 87:**

Kensrue discloses the claimed invention except several drive motors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include several drive motors since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. (St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claims 59, 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kensrue in view of Fox, (US 4,937,417).**

The teachings of Kensrue have been discussed above.

Kensrue also teaches:

**Regarding Claim 64:** Fig 2 shows roller 54 having a gear around its outside being fastened to the block 12 or intermediate piece.

Kensrue fails to teach:

**Regarding Claim 59:** A welding torch wherein one bearing is fixedly connected with the torch housing and a further bearing is detachably fastened thereto.

Fox teaches:

**Regarding Claim 59:** Fig 6 shows bearings 122 and 124 being attached to the housing and are capable of being detached.

In view of the teachings of Fox, it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Kensrue, the bearings connected to the housing since Fox teaches the bearings connected to the housing to allow the drive shaft to rotate.

**7. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kensrue in view of Hudson et al (US 2,808,498).**

The teachings of Kensrue have been discussed above.

Kensrue fails to teach:

**Regarding Claim 66:** A welding torch wherein, in the region of the drive motor, cooling channels and/or cooling ducts are arranged in the torch housing.

Hudson teaches:

**Regarding Claim 66:** Fig 1 shows a water pipe 34 inside water jacket 28 which is in the torch housing.

In view of Hudson et al's teachings it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Kensrue, the cooling channel in the torch housing since Hudson teaches the water jacket and water pipe for cooling the welding torch.

**8. Claims 69 and 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kensrue in view of Huismann et al (US 2004/0016788).**

The teachings of Kensrue have been discussed above.

Kensrue fails to teach:

**Regarding Claim 69:** A welding torch, wherein the motor shaft is arranged axially to the welding wire, and the welding wire extends through the hollowly designed motor shaft.

**Regarding Claim 86:** A welding torch, wherein the individual parts of the drive motor comprise a memory module for the recognition of the characteristics of the drive motor.

Huismann teaches:

**Regarding Claim 69:** The motor shaft 401 is arranged axially to the welding wire 209 and the wire passes through the shaft. **See Paragraph [0048].**

**Regarding Claim 86:** Sensors monitor feedback input and are capable of storing information about the motor. **See Paragraph [0049].**

In view of Huismann et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Kensrue, the shaft arranged axially to the wire with the wire passing through it and the memory since, Huismann teaches the hollow motor shaft arranged axially to the wire with welding wire passing through it for increasing the length of the wire path between the tip and the wire source and the sensors for monitoring the motor characteristics and controlling the process.

**9. Claim 85 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kensrue in view of applicant admitted prior art.**

The teachings of Kensrue have been discussed above.

Kensrue fails to teach:

**Regarding Claim 85:** A welding torch, wherein an encoder is connected with the rotor or the drive roller.

Applicant admits:

**Regarding Claim 85:** any encoder is known from the prior art. **See Page 16, Line 8 of the spec.**

In view of Applicant's admitted prior art, it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the teachings of Kensrue the encoder since the applicant admits an encoder may be connected to the drive roller for converting the angular position of the shaft to an analog or digital signal.

### ***Response to Arguments***

1. Applicant's arguments filed 7/12/2011 have been fully considered but they are not persuasive.

In response to applicant's argument on page 14 of the reply, the base body and stator housing are essentially arbitrary terms used to reference and indefinite area or indefinite part as no structure of these terms is claimed. The drawing references numbers are not to be given patentable weight as it is improper to import claim limitations from the specification. The structure of the base body and stator housing could be any part of the torch housing while keeping in mind that the stator housing is not positively recited.

In response to applicant's argument on pages 14-15, the casing 20 in Kensrue is considered the stator housing and/or base body as no clear structure is claimed.

2. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN JENNISON whose telephone number is (571)270-5930. The examiner can normally be reached on M-Th 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TU HOANG can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN JENNISON/  
Examiner, Art Unit 3742

3/9/2012

/TU B HOANG/  
Supervisory Patent Examiner, Art Unit 3742